

Claim(s)

Claims 8-6
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1. A method of correlating at least two views of an object, comprising:
providing a data structure that links first geometry of a first one of the view with a second one of the view; and
in response to a user selecting the first geometry, indicating a correlation between the first geometry and the second one of the views.
2. A method according to claim 1, wherein indicating includes highlighting the second one of the views.
3. A method, according to claim 1, wherein, in response to the second one of the views not being visible on a user screen, displaying the second one of the views on the user screen.
4. A method, according to claim 1, wherein the first geometry includes at least one of: a section line and a detail circle.
5. A method, according to claim 1, wherein the data structure that links the first geometry to the second one of the views is derived from underlying three dimensional model data from which the at least two views are generated.

6. A method, according to claim 1, wherein selecting the first geometry includes locating a cursor arrow on the first geometry and clicking a mouse button.

7. A method of displaying two views of an object, comprising:

selecting a first one of the views;

selecting a second one of the views; and

moving at least one of the views so that the first view is in proximity to the second view.

8. A method, according to claim 7, wherein, if the first view is a projection of the second view, moving at least one of the views includes snapping the views into alignment.

9. A method, according to claim 8, wherein aligning the first and second views includes using transform matrices associated with each of the views.

10. A method, according to claim 9, wherein the transform matrices correlate relative coordinates of each of the views with an absolute coordinate system.

11. A method, according to claim 7, wherein selecting the first view and selecting the second view includes locating a cursor arrow the views and clicking a mouse button.

12. A method, according to claim 7, wherein selecting the first view and selecting the second view includes dragging and dropping at least one of the views into closer proximity with the other one of the views.

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13. A method of correlating at least two views of an object, comprising:

providing a pointer having an absolute location;

displaying the pointer in a first one of the views at a relative location in the first view corresponding to the absolute location of the pointer; and

displaying the pointer in a second one of the views at a relative location in the second view corresponding to the absolute location of the pointer.

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14. A method, according to claim 13, wherein the relative locations are determined by applying a transform matrix for each of the views to the absolute location of the pointer.

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15. A method, according to claim 13, further comprising:

in response to the user moving the pointer in the first one of the views, moving the pointer a corresponding amount in the second one of the view.

16. A method, according to claim 15, wherein the user moving the pointer includes dragging and dropping the pointer in one of the views.

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17. A method, according to claim 15, further comprising:

determining a new absolute location of the pointer by applying an inverse of a transform matrix for the first one of the views to determine a new absolute location of the pointer based on movement of the pointer by the user in the first one of the views.

18. A method, according to claim 17, wherein a new relative location for the pointer in the second view is determined by applying the transform matrix for the second one of the views to the new absolute location of the pointer.

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19. A method of displaying a model having a plurality of two dimensional views associated therewith, comprising:

rotating the model to present a first one of the views;

pausing to show the first one of the views; and

continuously rotating and pausing the model to present other ones of the views.

11 20. A method, according to claim 19, further comprising:

in response to a user indicating that rotation should stop, suspending rotation until the user indicates otherwise.

12 21. A method, according to claim 20, further comprising:

after the user has indicated that rotation should stop at a first particular one of the views, indicating a correlation between a first geometry of the first particular one of the views and a second particular one of the views.

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~~22~~. A method according to claim ~~21~~¹², wherein indicating includes highlighting the second particular one of the views.

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~~23~~. A method, according to claim ~~21~~¹², wherein, in response to the second particular one of the views not being visible on a user screen, displaying the second particular one of the views on the user screen.

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~~24~~. A method, according to claim ~~21~~¹², wherein the first geometry includes at least one of: a section line and a detail circle.

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~~25~~. A method, according to claim ~~21~~¹², further comprising:
after indicating a correlation between a first geometry of the first particular one of the views and a second particular one of the views, rotating the model to present the second particular one of the views.

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~~26~~. A method, according to claim ~~19~~¹⁰, further comprising:
in response to a presented view being a section view, removing a portion of the model to show the view.

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27. A computer-based system for providing interpretation of a two-dimensional electronic drawing having a plurality of views, comprising:

a virtual folding process for permitting a viewer to view selected views in proximity to each other from a plurality of the possible views;

a hyperlink process for simultaneously highlighting the coordinates of a viewed object as the coordinates appear in more than one view;

a pointer for simultaneously pointing to the same point of a viewed object as the point appears in more than one view; and

a drawing animator for rotating the three-dimensional depiction about an axis of rotation and highlighting a two-dimensional view when the view is coincident with the plane of the drawing.

28. A computer-based system, according to claim 27, wherein data for the two dimensional drawing and a program for displaying the drawing are stored in a single file.

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